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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,489	07/16/2003	Raymond W. Blasingame	15436.114.5	9071
22913	7590	05/03/2006	EXAMINER	
WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111			PAK, SUNG H	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/620,489

Applicant(s)

BLASINGAME ET AL.

Examiner

Sung H. Pak

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,3,6-12,15,18 and 40-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,6-12,15,18 and 40-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/01/2006 has been entered.

### ***Response to Arguments***

Applicant's arguments with respect to pending claims have been considered but are moot in view of the new ground(s) of rejection and the request for continued examination.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 2874

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 6-12, 15, 18, 40-44, 47-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slater et al (US 2002/0172471 A1) in view of Brandy et al (US 6,275,643 B1).

Slater discloses an optical device with most of the limitations set forth in the claims, including: a housing (Figs. 2A-2B); a sleeve situated in ('108' Fig. 1A); and attached to said housing (Fig. 1C); the sleeve having a changeable inside diameter (paragraph 0009); a ferrule (paragraph 0018) removably positioned between within the sleeve, a relation between the sleeve and the ferrule being such that when the ferrule is positioned within the ferrule, the sleeve has a first inside diameter, and after the ferrule is removed from the sleeve, the sleeve has a second inside diameter that is less than the first inside diameter (paragraph 0008); wherein the sleeve has a lengthwise slit (Fig. 1B); wherein said ferrule has an outside diameter larger than said inside diameter of said sleeve when said ferrule is not situated in said sleeve and the inside diameter of said sleeve is substantially the same as the outside diameter of the ferrule when said ferrule is situated in the sleeve (paragraph 0008, 0018-0019); wherein the ferrule holds an optical fiber (paragraph 0018); wherein an end of the optical fiber in said ferrule is aligned with an optoelectronic element situated in the housing (paragraph 0007); wherein the sleeve is configured to apply pressure at plurality of points of contact between the sleeve and the ferrule (paragraph 0024, see also Fig. 4); wherein the sleeve is attached to the housing by a single strip of metallization covering an arc of about 45 degrees or less of the circumference of the sleeve and running the length of the sleeve (paragraph 0020, Fig. 1C).

However, Slater does not explicitly discuss the sleeve having a rounded outside diameter edge and a beveled inside diameter edge as claimed. On the other hand, such sleeves are well known and common in the optical fiber connector art, for example, as shown by Brandy et al (Fig. 3A clearly shows the beveled inside edge of the ferrule holding sleeve, and Fig. 3B clearly shows the rounded outside edge of the sleeve). Such features are well known in the art to be advantageous and desirable because it facilitates the mechanical coupling (i.e. insertion) of optical fiber ferrule by allowing the ferrule to enter the sleeve without absolutely precise alignment between the sleeve opening and the ferrule. Also, rounded outside edge and beveled inside edge of the sleeve prevents any damage to the tip of the fiber ferrule, should the ferrule contacts the opening of the sleeve with less than perfect alignment. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of Slater to have a sleeve with rounded outer edge and beveled inside edge.

Claims 45-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Slater et al (US 2002/0172471 A1) and Brandy et al (US 6,275,643 B1).

As discussed above, Slater, in view of Brandy, renders all claimed limitations obvious.

However, it does not explicitly teach the use of a single mode fiber and an optical transmitter or a receiver.

However, the use of a single mode fiber and/or the use of an optical transmitter/ receiver is well known and common in the art. Single mode fiber and optical transmitter/ receiver are advantageously used to provide efficient optical communications between optoelectronic

Art Unit: 2874

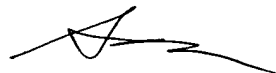
components. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the device of Slater to have single mode fiber and optical transmitter/ receiver.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sung H. Pak whose telephone number is (571) 272-2353. The examiner can normally be reached on Monday- Friday, 9AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571)272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sung H. Pak  
Primary Patent Examiner  
Art Unit 2874